

Montana Department of Natural Resources and Conservation  
Water Resources Division  
Water Rights Bureau

**ENVIRONMENTAL ASSESSMENT**  
**For Routine Actions with Limited Environmental Impact**

**Part I. Proposed Action Description**

1. Applicant/Contact name and address: **Joe and Glenda Horner  
3115 Rainbow Dam Rd  
Great Falls, MT 59404**
2. Type of action: **Combined Application for Beneficial Water Use Permit No. 41K 30149892 and Application to Change an Existing Non-Irrigation Water Right No. 41K 30149891**
3. Water source name: **Groundwater (41K 30149892) and the Sun River (41K 30149891)**
4. Location affected by project: **The project place of use for Industrial and Mitigation purposes is generally located in the S2 Sec 36, T21N R1W and the E2 Section 31 T21N R1E, Cascade County.**
5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

**This proposed project includes two water right applications: 1) permit application for a proposed groundwater appropriation; and 2) change application to mitigate surface water depletions caused by the groundwater appropriation. The DNRC shall issue a permit or change authorization if an Applicant proves the criteria in 85-2-311 or 85-2-402 of the Montana Code Annotated are met.**

**Applicants propose to divert groundwater under a 20-year temporary permit, from an unconfined gravel and sand aquifer in the Quaternary alluvial sediments of the Sun River Valley. The project is located 2 miles east of the town of Sun River, Montana. The means of diversion is a pump that appropriates groundwater from an inactive gravel pit excavated into the shallow aquifer. The existing pit is located in the S2N2 Section 36, T21N, R1W, and the pumping station is situated in the southern portion of the pit in the SESENW Section 36. The pumping pit has existed on the property for many years and is no longer mined for gravel. Water will be diverted from the old pit at a flow rate of 400 gallons per minute (GPM), diverted volume of up to 65.4 acre-feet (AF) and consumed volume of up to 1.84 AF from March 15 through December 1. Water will be used for industrial purposes to wash gravel mined from an active gravel pit adjacent to the source pit. The gravel mining operation is permitted under Montana Department of Environmental Quality Opencut Permit No. 1868. The gravel wash plant, or the place of use, is in the NWSE Section 36, T21N, R1W.**

Application to Change an Existing Non-Irrigation Water Right No. 41K 30149891 is proposed to provide mitigation for Beneficial Water Use Permit No. 41K 30149892 by retiring a portion of historic livestock use from the Sun River. The temporary mitigation change is for 10 years and proposes to retire a year-round average of up to 55 animal units so that an annual volume of 1.84 AF of historically consumed stock water is left in the source. This proposal would replace or mitigate the consumptive volume depletions associated with the new permit for gravel-washing. Since the proposed change authorization will eliminate 1.84 AF of historic depletions to the Sun River by reducing stock numbers, there will be a beneficial effect to the river and no adverse environmental impacts should occur from the change. For those reasons, the remainder of this document will consider the potential impacts from the proposed groundwater permit based on the associated mitigation plan.

6. Agencies consulted during preparation of the Environmental Assessment:  
(include agencies with overlapping jurisdiction)

Dept. of Environmental Quality Website – Clean Water Act Information Center  
MT. National Heritage Program Website - Species of Concern  
USDI Fish & Wildlife Service Website - Endangered and Threatened Species  
USDA Natural Resources Conservation Service – Web Soil Survey  
USDI Fish & Wildlife Service – Wetlands Online Mapper

## **Part II. Environmental Review**

### **1. Environmental Impact Checklist:**

<b>PHYSICAL ENVIRONMENT</b>
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#### **WATER QUANTITY, QUALITY AND DISTRIBUTION**

**Water quantity** - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

*Determination:*           **No Significant Impact.**

The source of water associated with Beneficial Water Use Permit No. 41K 30149892 is shallow groundwater in Cascade County. Groundwater is not considered a dewatered source by MT FWP. Depletion effects from diverting groundwater are estimated to manifest in the lower reach of Mill Coulee Creek on the Applicant's property and the Sun River in the S2 Section 36 T21N R1W, downstream to the NWNE Section 31 T21N R1E. Neither surface water source is considered a dewatered stream by MT FWP.

There are no water rights on the Mill Coulee Creek reach through the Applicant's property and as described above, the Applicant proposes to mitigate the depletion effects by retiring a portion of their Sun River stock right. In addition, the Department will impose a measurement condition to this permit application, if granted. So long as the

**Applicants provide mitigation and adhere to the measurement condition, no significant impacts to the Sun River are anticipated.**

**Water quality** - *Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

*Determination:*           **No Significant Impact.**

**The source is groundwater. The DEQ website identifies the stretch of the Sun River that may be potentially impacted (Gibson Dam to Muddy Creek) as not fully supporting aquatic life. Probable causes are listed as alteration in streamside or littoral vegetation covers, flow regime modification, sedimentation-siltation, and temperature. The probable sources include impacts from hydrostructure flow regulation and modification, channelization, and agricultural uses such as livestock grazing in riparian and shoreline areas. The mitigation proposal is to remove some livestock use in the riparian zone and there is a low likelihood that water quality will be adversely affected as a result of the proposed project.**

**Groundwater** - *Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

*Determination:*           **No Significant Impact.**

**The proposed permit should not have a significant impact on ground water quality or supply. The groundwater diversion is basically cycling water through a large inactive gravel pit that has been in place for many years. In addition, the Applicant is proposing to mitigate any depletion impacts to the Sun River.**

**DIVERSION WORKS** - *Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

*Determination:*           **No Significant Impact.**

**It is not anticipated that the proposed project will have a significant impact on stream channels, riparian areas, or stream flows. The Applicants are proposing to use groundwater to wash gravel approximately a 1/4-mile from the Sun River and the mitigation plan will remove some livestock from the riparian zone.**

#### **UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES**

**Endangered and threatened species** - *Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

*Determination:*           **No Significant Impact.**

The Montana National Heritage Program lists four Species of Concern, one mammal and three birds, within Township 21 North, Range 1 West. The common names for the mammal species is the Grizzly Bear. The three bird species are the Great Blue Heron, Chestnut-collared Longspur, and Bobolink. One special status species was also listed, a bird, the Bald Eagle. The project associated with this permit will occur on areas previously disturbed by gravel extraction practices and no impacts to any of these species are expected.

The USDI Fish & Wildlife Service Website lists the Pallid Sturgeon as endangered. It also lists the Canada Lynx, Grizzly Bear, Red Knot, and Piping Plover as threatened. It lists the Wolverine as proposed species and the Whitebark Pine as a candidate species. Although these species are identified in Cascade County because one may reasonably expect them to occur somewhere in the county, not all are necessarily found in the area of the project. Additionally, it is unlikely that the proposed action will displace the species.

The proposed project is not located in designated sage grouse habitat.

**Wetlands** - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

Determination:           **No Significant Impact.**

The USDI Fish & Wildlife Service – Wetlands Online Mapper considers the source pit as a freshwater pond constructed by human excavation. The website also shows a small wetland to the east of the proposed gravel washing area. The Applicants' place of use has been previously disturbed for industrial use and no impacts to wetlands are predicted.

**Ponds** - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

Determination:           **No Significant Impact.**

This project diverts and cycles water from an inactive gravel pit and should not substantially affect water levels in the pit. No impact to wildlife, waterfowl, or fisheries is anticipated.

**GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE** - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

Determination:           **No Significant Impact.**

No significant impacts to the soil profile are anticipated, the Applicant will wash gravel on previously disturbed land. A small portion of the diverted water will remain with the washed material. Most of the diverted water will be cycled back to the inactive pit and available for reuse. The industrial process should not contribute to saline seep and it is not projected that soil quality, alteration of soil stability, or moisture content will be negatively impacted by this project.

**VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS** - Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.

*Determination:*           **No Significant Impact.**

**The place of use has been previously disturbed and any impacts to existing areas have already occurred. Normal weed management can be used to control noxious weeds potentially invading previously disturbed areas and no spread of noxious weeds should be associated with this application. It is the responsibility of the property owner to control noxious weeds on their property.**

**AIR QUALITY** - Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

*Determination:*           **No Significant Impact.**

**No impacts to air quality or adverse effects to vegetation are expected as a result of an appropriation of water; the pump will be powered by an electric motor. A separate groundwater appropriation from a nearby well will provide dust abatement for the project.**

**HISTORICAL AND ARCHEOLOGICAL SITES** - Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.

*Determination:*           **N/A – project not located on State or Federal Lands.**

**DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY** - Assess any other impacts on environmental resources of land, water and energy not already addressed.

*Determination:*           **No Significant Impact.**

**No additional impacts are anticipated.**

<b>HUMAN ENVIRONMENT</b>
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**LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS** - Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.

*Determination:*           **No Significant Impact.**

**No locally adopted environmental plans or goals have been identified.**

**ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES** - Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.

*Determination:*           **No Significant Impact.**

**There are no known recreational or wilderness activities associated with the property that access could be impacted. The proposed appropriation is situated entirely on private property.**

**HUMAN HEALTH** - *Assess whether the proposed project impacts on human health.*

*Determination:* **No Significant Impact.**

**No impacts to human health have been identified.**

**PRIVATE PROPERTY** - *Assess whether there are any government regulatory impacts on private property rights.*

Yes\_\_\_ No\_\_**X**\_\_ *If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.*

*Determination:* **No known impacts.**

**OTHER HUMAN ENVIRONMENTAL ISSUES** - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

*Impacts on:*

- (a) Cultural uniqueness and diversity? **None**
- (b) Local and state tax base and tax revenues? **The commercial sale of gravel may increase tax revenues.**
- (c) Existing land uses? **None**
- (d) Quantity and distribution of employment? **None**
- (e) Distribution and density of population and housing? **None**
- (f) Demands for government services? **None**
- (g) Industrial and commercial activity? **None**
- (h) Utilities? **Increased electrical consumption for industrial use.**
- (i) Transportation? **None**
- (j) Safety? **None**
- (k) Other appropriate social and economic circumstances? **None**

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts: **No secondary impacts have been identified.**

Cumulative Impacts: **No cumulative impacts have been identified.**

3. *Describe any mitigation/stipulation measures:*

**The Applicant proposes to mitigate consumptive depletions by retiring a portion of their stock use from the Sun River. The Applicant also proposes to measure all diversions to the wash plant.**

4. *Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:*

**No action alternative: Deny the application. This alternative would result in not authorizing the Applicants to use their commercial gravel washing operation.**

*PART III. Conclusion*

**1. Preferred Alternative**

The preferred alternative is the proposed alternative.

**2 Comments and Responses**

None Received.

***Finding:***

Yes\_\_\_ No **X** Based on the significance criteria evaluated in this EA, is an EIS required?

*If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:*

**None of the identified impacts for any of the alternatives are significant as defined in ARM 36.2.524.**

*Name of person(s) responsible for preparation of EA:*

*Name:* Douglas D. Mann

*Title:* Hydrologist – Lewistown Regional Office

*Date:* 9/15/2021